send an electronic signal through said coaxial cable to a second external antenna comprising said further circuit.

Bl Concl.

40. The method as recited in claim 39, wherein said receiving support has a conductive shield thereon.

Remarks

Entry of new claims 37 through 40 and passage to allowance of this Application is earnestly solicited. A check to cover the examination for the two extra independent claims and two extra dependent claims is enclosed herewith.

A copy of the claims 16-40 as believed allowable is included as a scanable copy. Should the Examiner have any unresolved issues, the Examiner is invited to call the undersigned for a discussion of same.

Respectfully submitted,

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16.A method of communicating between a personal communication device and a further circuit, comprising the steps of:arranging a receiving support for receiving and supporting said personal communications device, said personal communication device having an externally radiative first antenna;

arranging a radiative coupling probe at said receiving support and in a spaced-apart and offset relationship with respect to said radiative first antenna of a personal communication device on said support, to provide a capacitive coupling arrangement with respect to said radiative first antenna;

connecting said radiative coupling probe to said further circuit for communication with said first antenna; and

energizing said personal communication device so as to receive and/or send an electronic signal thereby, through radiative communication between said first antenna and said further circuit.

17.The method of communicating between a personal communication device and a further circuit, as recited in claim 16, including the step of:

arranging said coupling probe in a separate housing.

18. The method of communicating between a personal communication device and a further circuit, as recited in claim 16, including the step of:

fabricating said coupling probe as a generally flat electrical conductor.

19. The method of communicating between a personal communication device and a further circuit, as recited in claim 16, including the step of:

shielding said coupling probe within said housing, while permitting radio frequency communication between said first antenna and said coupling probe.

20. The method of communicating between a personal communication device and a further circuit, as recited in claim 16, including the step of:

attaching a second antenna to said further circuit, to permit radio frequency communication between said personal communication device and said second antenna via said coupling probe.

21. The method of communicating between a personal communication device and a further circuit, as recited in claim 16, wherein said receiving support comprises an article of furniture.

22. The method of communicating between a personal communication device and a further circuit, as recited in claim 21, wherein said article of furniture is selected from the group comprised of: an airplane seat tray, a desk, a chair, a table and an automobile.

23. A docking system for providing hands-free operation of a personal communication device, comprising:

a placement device to position said personal communication device with respect to said docking system;

input and output circuitry having a broad bandwidth capable of conducting rf energy on a plurality of operating frequency bands from an external transmission line to said personal communication device.

24. The docking system as recited in claim 23, wherein said plurality of operating frequency bands are harmonically related.

25. The docking system as recited in claim 23, wherein said plurality of operating frequency bands are placed within a range of frequencies from the VHF region to the microwave region.

26. A method for the permitting use of and for the monitoring of communication of a personal communication device arranged within an rf resistant structure, said method including the use of a further circuit within said rf resistant structure, said personal communication device having an externally radiative antenna, said method comprising the steps of:

arranging at least one first ungrounded capacitive coupling plate coupling probe in said rf resistant structure so as to be in a spaced apart relationship with respect to said externally radiative antenna of said personal communication device to permit radio frequency communication therebetween;

connecting said coupling probe in said rf resistant structure to said further circuit in said rf resistant structure;

connecting a signal transmission monitoring computer to said further circuit for collecting personal communication device user information;

connecting said further circuit to a second antenna outside of said rf resistant structure;

arranging a personal communication device within said rf resistant structure so that said externally radiative antenna of said personal communication device is spaced apart from said coupling probe within said rf structure;

energizing said personal communication device to permit communication through said further circuit and said second antenna arranged outside of said rf resistant structure; and

monitoring use of said personal communication device within said rf resistant structure.

27. The method of improving the radio frequency communication of a personal communication device using a further circuit therewith, as recited in claim 26, including the steps of:

billing a user of said personal communication device for costs of service of said personal communication device while said personal communication device is utilized within said rf resistant structure.

28. The method of improving the radio frequency communication of a personal communication device using a further circuit therewith, as recited in claim 26, including the step of:

connecting a second coupling probe within said rf resistant structure with said further circuit in said rf resistant structure, to permit said personal communication device to improve communication thereof with said second antenna outside of said rf resistant structure.

29. The method of improving the radio frequency communication of a personal communication device using a further circuit therewith, as recited in claim 26, wherein said structure is a building.

30. The method of improving the radio frequency communication of a personal communication device using a further circuit therewith, as recited in claim 26, wherein said rf resistant structure is an airplane.

31. The method of improving the radio frequency communication of a personal communication device using a further circuit therewith, as recited in claim 26, wherein said rf resistant structure is an article of furniture.

32. The method of improving the radio frequency communication of a personal communication device using a further circuit therewith, as recited in claim 26, wherein said rf resistant structure is an automobile.

33. A method of improving the communication of a personal communication device in an rf resistant structure by using a further circuit therewith, said personal communication device having an externally radiative antenna, said method comprising the steps of:

arranging an ungrounded coupling plate coupling probe within said structure so as to be in an offset relationship with respect to said

externally radiative antenna of said personal communication device to permit radio frequency communication therebetween;

connecting said coupling probe to a further circuit;

connecting a loudspeaker independent of said personal communication device, to said further circuit;

connecting said further circuit to a second antenna external of said structure; and

placing a personal communication device within said structure so that its externally radiative antenna is spaced apart from said coupling probe; and

energizing said personal communication device to permit communication outside of said structure, through said second antenna.

34. The method of improving the radio frequency communication of a personal communication device using a further circuit therewith, as recited in claim 33, including the steps of

installing a battery in said personal communication device; and

charging said battery in said personal communication device while said personal communication device is arranged within said structure.

35. The method of improving the radio frequency communication of a personal communication device using a further circuit therewith, as recited in claim 33, wherein said personal communication device comprises a cellular telephone.

36. The method of improving the radio frequency communication of a personal communication device using a further circuit therewith, as recited in claim 35, including the step of:

operating said personal communication device at a frequency from the very high frequency region of the spectrum to the microwave region of the spectrum.

37. A method of communicating between a personal communication device and a further circuit of an automobile or the like, to provide an improved range for said communication device:

supporting said personal communication device on a receiving support, said personal communication device having an externally radiative first antenna and a battery, said receiving support having a

charging pin to charge said battery, said receiving support having a connection for a loudspeaker arranged independent of said personal communication device;

placing a tuned coupling probe at said receiving support in an offset and adjacent position with respect to said first antenna when said personal communication device is supported on said receiving support wherein said coupling probe is physically positioned between a portion of a wall of said receiving support and said first antenna;

connecting said tuned coupling probe to said further circuit by a coaxial cable connector to permit communication between said personal communication device and said further circuit;

energizing said personal communication device so as to receive and/or send an electronic signal through said coaxial cable to a second external antenna comprising said further circuit.

38. The method as recited in claim 37, wherein said receiving support has a conductive shield thereon.

39. A docking system for a personal communication device for connection of said device to a further circuit of an automobile or the like, to provide an improved range for said communication device comprising:

a receiving support for receiving and supporting said personal communication device wherein said personal communication device has an externally radiative first antenna and a battery, said receiving support having a charging pin to charge said battery and said receiving support having a connection to a loudspeaker arranged independent of said personal communication device;

a tuned coupling probe arranged at said receiving support in an offset and adjacent position with respect to said first antenna when said personal communication device is supported on said receiving support and, wherein said coupling probe is physically positioned between a portion of a wall of said receiving support and said first antenna;

said tuned coupling probe being connected to said further circuit by a coaxial cable connector to permit communication between said personal communication device and said further circuit, wherein said personal communication device may be energized so as to receive and/or send an electronic signal through said coaxial cable to a second external antenna comprising said further circuit.

40. The method as recited in claim 39, wherein said receiving support has a conductive shield thereon.